

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
A National Broadband Plan for Our Future)	GV Docket No. 09-51

**REPLY COMMENTS OF

THE RANGE FAMILY OF TELCOS**

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SUMMARY

The Range Family expects that broadband will soon become an indispensable part of everyday life for nearly every American. The Range Family believes that for speed, reliability, safety, and upgradeability reasons, a fiber network is best suited as the primary network for the broadband-based services of the future. While mobile wireless broadband networks provide mobility advantages relative to landline networks, the Range Family believes that many of the most transformative and bandwidth-intensive service offerings will be better delivered via a fiber network. While many companies, including those in the Range Family, are able to provide fiber to the home (FTTH) with existing support mechanisms, two primary changes to the Universal Service Fund (USF) will be necessary for all consumers to have access to broadband. First, broadband needs to be explicitly supported by USF. Second, middle mile transport needs to be supported in order for customers to receive the full bandwidth potential of FTTH. The Commission should also recommend that Congress appropriate additional money for RUS to offer grants and low interest rate loans for the construction of fiber networks in rural areas.

Given these views on broadband, the Range Family agrees with the positions advocated by WTA and OPASTCO. We disagree with the positions of AT&T that de-emphasize the importance of speed in the broadband future. We do agree with the limitations of wireless broadband identified by Verizon and Verizon Wireless, and CTIA. Also, given some of the shared network issues associated with cable, as well as the fact that cable companies have historically not provided broadband services in the out-of-town areas served by rural carriers, the Range Family believes that it wouldn't make sense in most instances for cable companies to receive financial support to provide broadband services (as advocated by NCTA and Comcast).

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The Range Family of Telcos (“the Range Family”) hereby submits its Reply Comments in response to the Commission’s *Notice of Inquiry* (A National Broadband Plan for our Future), GN Docket No. 09-51, FCC 09-31, released April 8, 2009. Before replying to specific comments of others, we first provide our positions on the goals the Commission should establish with respect broadband networks and the funding necessary to build those networks. In a nutshell, the Range Family believes that a ubiquitous fiber network is best suited to deliver the innovative and bandwidth-intensive services that have the greatest potential to lead to economic growth and societal improvements, and that additional grants and a revamped USF will be required for companies to deploy fiber networks in rural areas.

The Range Family consists of three rural local exchange carriers (“RLECs”) - Range Telephone Cooperative, Inc. (“Range”), RT Communications, Inc. (“RT”), Dubois Telephone Exchange, Inc. (“Dubois”) – and one competitive local exchange carrier (“CLEC”) - Advanced Communications Technology, Inc. (“ACT”). RT, Dubois, and ACT are wholly owned

subsidiaries of Range. Between its four operations, the Range Family provides services in Montana, Wyoming, South Dakota, and Colorado. Range, RT, and DTE each provide broadband access to more than 92% of their customers. While we are closing the gap in an attempt to provide broadband access to 100% of our customers, we are also increasing bandwidth to customers by deploying fiber plant closer to customers with the goal of having Fiber-to-the-Home (“FTTH”) to as many customers as economically viable. It is the corporation’s strategic plan for each RLEC in the family to provide FTTH to 50% of their customers within 5 years. Some of our communities already have FTTH and construction is under way to bring FTTH to additional communities very soon. While we’ve been able to bring advanced broadband networks to our customers with currently available funding and support options, it will take additional measures for consumers in the very rural parts of our service areas to have access to the advanced broadband network capabilities that will be available to other consumers in our service areas. It is our hope that our experience providing broadband access to rural communities will be helpful to the Commission as it develops its National Broadband Plan.

II. The Broadband Future

Many of the comments filed in this docket contained examples of emerging broadband-enabled services, including smart meters, video home security, distance learning, smart appliances, virtual laboratories, telesurgery, remote medical/diagnosis/monitoring/imaging, and ultra high definition video. Some of the identified benefits of broadband-enabled services include economic growth, job creation, environmental, health, safety, educational, entrepreneurial activity, civic participation, and social networking. As the FCC and Congress already recognize, it is clearly in the public interest to expand broadband deployment to unserved areas, increase the affordability of broadband access, and increase broadband speeds. The Range

Family expects that broadband will soon become an indispensable part of everyday life for nearly every American. Because of the types of services they can enable, broadband networks have the potential to produce as transformative a change in everyday life as that produced by any technology that has ever existed. If a telecommunications carrier expects to survive and thrive in the broadband future, it will need to provide reliable networks that can handle the bandwidth-intensive services that businesses and consumers will demand. The Range Family is deploying such networks with the intent to provide the best broadband network possible in our rural communities.

In these Reply Comments, we do not attempt to grade the societal benefits that may be achieved from various potential service offerings. Certain services that may be offered via broadband networks could objectively have a greater impact on the public good than others. However, the Range Family can envision how broadband could help the Commission achieve one of the goals that has been considered by the FCC, namely a la carte video service offerings. For various reasons, video programmers – cable, satellite, and some telecommunications carriers – have offered packaged video products to consumers in a manner that does not allow consumers to pick and choose on a channel-by-channel basis the channels to which they subscribe. Accordingly, most consumers pay a monthly fee for a bundle of channels but watch only a relatively small subset of those channels. With a ubiquitous and reliable broadband network, the Range Family can easily envision a scenario where the majority of consumers obtain all of their desired video content on a la carte basis directly from content providers and not from video programmers as we know them today. We are currently in the infancy of such a transformative change in video delivery as more and more entities are providing videos directly to consumers over the Internet (e.g. NBC, CNN, MLB, etc.) and many consumers are canceling their video

programming subscriptions and obtaining all of their video via the Internet. The number of consumers who make this switch will only increase as TVs with direct broadband capability come to market, thereby eliminating the need to either watch video on computers or use various devices to connect modems and computers to TVs. In order to survive, traditional video programmers will need to offer more competitive pricing and programming options to consumers. This is just one example of how broadband can enable innovation and efficiencies. We've already seen how the broadband was used to offer competitive voice offerings via VoIP, Femtocells, etc.

When a ubiquitous broadband network is deployed, companies and institutions will be able to offer innovative products and services to meet the needs of the American people. Accordingly, an investment in broadband can lead to economic growth and prosperity because “a world-leading broadband infrastructure in America can be an ongoing engine for innovation and job creation throughout the country, from our rural towns to our inner cities, while helping address vital national challenges such as public safety and education, health care and energy independence—ultimately helping give all of our country’s children the future we dream for them.”¹

III. Fiber Networks Needed for the Broadband Future

The Range Family believes that for speed, reliability, safety, and upgradeability reasons, a fiber network is best suited as the primary network for the broadband-based services of the future. While wireless broadband networks provide mobility advantages relative to landline networks, the Range Family believes that many of the most transformative service offerings will

¹ Statement of Julius Genachowski, Nominee to Serve as Chairman of the Federal Communications Commission, Before the U.S. Senate Committee on Commerce, Science, and Transportation, June 16, 2009.

be better delivered via a fiber network. The Range Family also believes that, for most Americans, mobile wireless broadband networks will be better suited as a complimentary medium to deliver services that are less bandwidth-intensive and that have lower reliability and safety expectations. A recent study has confirmed the importance of landline broadband relative to wireless broadband when it found that, faced with the need to reduce household expenditures, 48% of Americans would drop their mobile data plan completely while only 10% would drop their home broadband subscriptions. “These results suggest that while American consumers consider home broadband service to be a vital utility, they see mobile data service as simply ‘nice to have.’”² The Range Family believes that landline broadband will become even more vital to consumers relative to mobile broadband in the future. Moreover, we believe that fiber is the best technology for the broadband future because it has a number of advantages relative to wireless technologies.

A. Fiber Bandwidth Capacity Can Be Easily Upgraded

While fiber can be expensive to deploy in rural areas, once that initial deployment is made, fiber has the potential for unlimited bandwidth capacity upgrades. Specifically, the limitations on bandwidth on a fiber network are associated with the optical equipment placed on the ends of the fiber routes. As the bandwidth capability of optical equipment improves, it is simply a matter of replacing the old equipment on the ends of the fiber routes with the new equipment. There is no need to dig up and replace the fiber itself to improve its bandwidth

² David Mercer, Vice President of Strategic Analytics Digital Consumer Practice, “48% of Americans Would Drop Mobile Data Service Completely Mobile Data, Voice Most Vulnerable in the Bundle.” *Strategy Analytics Press Release*, June 24, 2009. <http://www.strategyanalytics.com/default.aspx?mod=PressReleaseViewer&a0=4751>

capabilities. In contrast, in order to increase bandwidth with wireless networks, additional rights of way and construction are required to place additional towers closer to customers. There are also bandwidth caps with wireless networks because current spectrum allocations place an upper limit on the amount of bandwidth delivery possible via wireless technologies

B. Fiber is Reliable for Delivery of Critical Services

As anyone who has had a dropped or static-filled wireless call can attest, wireless technology is simply not as reliable as fiber technology. While consumers are willing to live with the less reliable service for mobility reasons associated with relatively low bandwidth services, it is highly doubtful that consumers are willing to live with less reliability as their primary broadband medium for some of the bandwidth-intensive services of the broadband future, such as telehealth and ultra high definition video services. Fiber networks can provide the reliability customers will expect for such services and should, therefore, be considered the preferred technology for the primary delivery of broadband-enabled services to most households.

C. Fiber Networks are More Secure than Wireless Networks

When the Secret Service attempted to prevent Barack Obama from using his Blackberry when he became president, there was a reason – wireless networks are less secure than landline networks. Many of the emerging broadband-enabled services, including medical diagnostics, medical imaging, and advanced home security systems – necessitate the use of the most secure network possible. Fiber networks provide that security because even with the best security options enabled, wireless transmissions are simply easier to hack than landline transmissions.

IV. Middle Mile Transport

The Range Family proposes that, in order to allow for the full bandwidth potential of FTTH, financial support should be provided for middle mile transport. While FTTH last mile connections can provide virtually unlimited bandwidth, customers will only be able to receive such high speeds if the middle mile transport contains sufficient capacity to deliver packets from the Internet backbone to the last mile connections. In many rural areas, it can be cost prohibitive to obtain adequate middle mile capacity. This is especially true in Wyoming and Montana given the very long distances across remote terrain where such transport must occur. Accordingly, the Range Family recommends that middle mile special transport costs be included in high cost broadband USF support calculations.

V. Broadband Funding

As the FCC summarized in its *Report a Rural Broadband Strategy*,³ building the nation's infrastructure has, from the nation's earliest days, required federal resources. Examples of federal resources being provided to build infrastructure include the postal system, the transcontinental railroad, rural electrification, universal telephone service, the interstate highway system, and the Internet. Just as federal investments in those infrastructures were repaid with economic growth and societal benefits, investments in the ubiquitous deployment of next-generation broadband networks will be repaid with economic growth and societal benefits. Although there are many portions of the country where federal financial resources will not be required since market forces will ensure that cutting edge broadband networks are deployed at affordable prices, in many rural areas, the economies of scale simply don't exist to allow a

³ *Bringing Broadband to Rural America: Report on a Rural Broadband Strategy*, Michael J. Copps, Acting Chairman, Federal Communications Commission, May 22, 2009.

carrier to provide broadband access to all customers at affordable rates. That's not to say that it is not in society's best interest to ensure that all consumers have broadband access. Rather, there are benefits from broadband that are not obtained solely by the company that deploys the broadband network in a manner that allows the broadband provider to fully recover its costs of providing the network. As with any other infrastructure deployed in rural areas, society benefits by having the infrastructure deployed ubiquitously even if, on a static and isolated basis, the consumer in the rural area is not paying a rate that allows for full recovery of the infrastructure deployed to that specific consumer. There are simply benefits obtained from ubiquitous network deployment that are not captured in a static and isolated price-to-cost analysis. This is especially true for broadband, which has the capability to produce huge economic and societal dividends. The FCC has already recognized the primary network effect of a ubiquitous broadband network when it stated that "the more people that connect to the broadband network, the more value the network has for everyone on it, including initial users."⁴

Given the economic and societal benefits of ubiquitous broadband deployment, the Range Family believes it is a wise investment for the government to provide funding in three primary ways: grants, low interest rate loans, and a restructured universal service fund (USF).

A. Grants

Grants are a great option for funding initial fiber construction in very rural areas. First, the biggest difference in the cost of fiber networks between rural areas and urban areas is the high initial construction cost to lay fiber over many miles in rural areas. Once the fiber is laid, the relative costs to maintain and upgrade those networks are much more comparable between

⁴ *Ibid*, para. 16 and footnote 297.

rural and urban networks. Thus, the need for USF to support rural fiber networks would be minimized if grants were used for initial construction, especially since the cost study upon which the rural USF support would not assume the recovery of the depreciation expenses for fiber network constructed with grant money.

Second, without grants, it is very difficult to recover the costs of broadband networks in very rural areas even with low interest rate loans and universal service support. Specifically, since universal service support allows a carrier to recover only a portion of their network costs, the portion that needs to be recovered from consumers is simply unaffordable in very rural areas where the costs are extremely high. By using grants for initial network construction, the amount that would need to be recovered from end users would be reduced such that rates could be set at affordable levels.

Accordingly, the Range Family proposes that the FCC recommend to Congress that additional appropriations be made for RUS to distribute grant money for the construction of fiber networks in rural areas that meet certain criteria, two of which would be that there is not currently broadband access in the area and that the population density is extremely low. Grants would also be ideal for the construction of middle mile transport in high cost areas.

B. Low Interest Rate Loans

Low interest rate loans provided by RUS have proven to be a great funding option for RLECs building broadband networks in rural areas. While the application process can at times appear burdensome given the amount of information required by RUS, the program has been very successful from a repayment perspective and in getting worthy projects deployed in needed areas. If there is a way to streamline the application process to reduce the costs associated with

the application, the Range Family would be interested in seeing something like that accomplished as long as it doesn't reduce the integrity of the program. Our primary concern with the program is whether there is enough money available in it. It is our understanding that there is currently a much greater demand for RUS loans than there is money available. Accordingly, the Range Family proposes that the FCC recommend to Congress that additional appropriations be made for RUS to distribute low interest rate loans.

C. Restructured USF

USF has been very successful in ensuring the near-universal availability of telephone service and in helping to finance the networks that ensure broadband availability to most Americans. However, USF should be restructured to fund broadband service rather than retain its traditional focus on voice services. As many others have recognized, voice service is just one of the things that will be carried on broadband networks of the future. Most of the economic and societal benefits of the broadband network will result from services other than voice services. Thus, it makes little sense to retain the focus of USF on voice services when it is the other services that will be carried over the network that will produce the greatest transformative changes in the country. Accordingly, the Range Family recommends that the USF change its USF rules to explicitly fund broadband service and middle mile transport.

Of course, there are many details that would need to be worked out in any reform of USF. Some of the details include the determining the types of broadband networks that would be supported, how many carriers would be supported in any given area, how costs would be calculated, what type of transition is needed for carriers to recover their circuit switched network costs, who contributes to the fund, contribution methods, etc. These are topics that the FCC has

wrestled with for a number of years and will continue to wrestle with in other dockets. The Range Family's positions on these issues mirror those of the Western Telecommunications Alliance. For purposes of this proceeding, though, we simply believe it is appropriate for the Commission to: 1) recognize that there is a continued need for USF and it needs to be focused on the funding of broadband; and 2) establish timeframes to accomplish USF reform as soon as possible.

VI. Reply Comments

A. Western Telecommunications Alliance (WTA)

The Range Family supports the comments of the WTA, particularly its positions that: 1) “[c]apacity, scalability, reliability, security, and environmental advantages require the National Broadband Network to be predominantly a fiber optic network that can furnish the high transmission speeds needed to accommodate the burgeoning and unfolding future next generation broadband services;” and 2) “[i]n rural areas served by RLECs, the Commission should continue to provide the predictable and sufficient Universal Service Fund support that has been so successful in enabling the construction and operation of quality, affordable and reasonably comparable networks and services, and to transition such support from the existing Public Switched Telecommunications Network to the developing National Broadband Network.”⁵

⁵ Comments of the Western Telecommunications Alliance, Summary pages ii and iii, respectively.

B. OPASTCO

The Range Family agrees with many of the comments of the Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO), including its position that: 1) “universal service support should be available to rural ILECs to offset the high costs of middle-mile transport;” and 2) that the practical speed limitations of mobile platforms mean that the level of speed they can offer cannot accommodate the transformative applications promised by broadband technology and, therefore, “wireless service, by itself, is insufficient for the long-term needs of consumers in rural service areas.”⁶

C. AT&T

While the Range Family agrees with AT&T’s stated goal to “aim high,”⁷ we do not agree with AT&T’s decidedly “aim low” approach to defining broadband. AT&T states that “the Commission should reject suggestions that it define broadband for purposes of the Plan as including only the fastest, most advanced service that can be envisioned using existing or reasonably foreseeable technology.”⁸ AT&T then provides examples of low-bandwidth services customers are *currently* using to support its claim that “[m]any consumers do not need—or want—the fastest connections possible.”⁹ The problem with AT&T’s de-emphasis on speed is that it doesn’t consider the services that consumers *will use in the future*. Since the Commission is developing a National Broadband Plan, it is important for it to understand, to the fullest extent possible, the services that consumers will be using in the future. If the Plan were to be simply reflective of current consumer needs, any infrastructure developed as a result of the Plan would

⁶ Comments of the Organization for the Promotion and Advancement of small Telecommunications Companies, pages 9, 15

⁷ Comments of AT&T, Inc., page ii

⁸ *Ibid*, pp. 17-18.

⁹ *Ibid*, p. 18.

quickly prove inadequate to meet growing customer bandwidth demand. While no one knows with precision all of the broadband-enabled services customers will be using 10, 20, 30, or more years from now, many of the services prognosticated in this proceeding are bandwidth-intensive and recent history shows that demand for bandwidth has been increasing at a rapid pace. If Congress and the FCC are seeking public dollars for investment in a ubiquitous broadband network, they should assure the country that the network is cutting edge, provides the most bang for the buck, and won't quickly become obsolete as demand increases. FTTH meets each of those criteria due to its upgradeability, reliability, and security advantages and should, therefore, be the primary network supported. If mobile broadband is also supported, as the Comments of some parties suggest, it should be supported as secondary and complimentary network.

D. Verizon and Verizon Wireless

Verizon and Verizon Wireless provide a comparison of the limitations of mobile broadband relative to fiber-based broadband. Specifically, Verizon and Verizon Wireless state:

The core networks for wireless and wireline networks are not substantially different. But, the “last mile” distribution/access system is. Mobile systems are shared bandwidth systems, the “last mile” for wireless being the shared radio link. All customers on a wireless network in the same area share that same capacity, meaning that the more one customer uses, the less that is available for all others attempting to use or access the network. The bandwidth that can be delivered is spread across all the active customers on the same base station antenna and is constrained by the RF signal strength and quality which vary with geography, weather, traffic, speed, and the position of the people and objects near the device. Resource-intensive use by one wireless broadband customer can and will impact the speeds at which others can communicate and their ability to access the network. This is unlike the dedicated user access technology used in many wireline broadband systems, where sharing of capacity occurs only at more central points in the network.¹⁰

Verizon goes on to state:

¹⁰ Comments of Verizon and Verizon Wireless, pp 103-104.

Wireless networks also face management challenges because they operate with very limited capacity, particularly when compared to a broadband system such as fiber. The more bandwidth available, the greater the throughput speeds that can be achieved. To start, fiber has much greater capacity than wireless. Moreover, since the radio link to the user must compensate for interference from other users and noise, which are not present in a fiber optic line, the attainable throughput for wireless broadband is significantly less than fiber even on comparable bandwidths. As a result, the throughput capabilities of wireless services are much more constrained than in the wireline environment.¹¹

The limitations of mobile wireless broadband identified by Verizon and Verizon Wireless provide a solid rationale for why FTTH should be the primary network supported. Verizon and Verizon Wireless are in a unique position to make these comparisons given the sheer number of customers Verizon serves on its FTTH network and Verizon Wireless serves with its mobile broadband network. The Range Family agrees with the limitations of mobile broadband relative to fiber-based broadband, as described by Verizon and Verizon Wireless. Again, these are valid reasons why fiber-based broadband should be the primary network supported and why mobile broadband, if supported at all, should be supported merely as a secondary and complimentary in those areas where is not likely to be provided via market mechanisms alone.

E. CTIA – The Wireless Association ®

In its Comments, CTIA also acknowledged the limitations of wireless broadband relative to wireline broadband. Specifically, CTIA states:

First, because of the shared air interface between the consumer device and the base station, wireless broadband customers share the capacity of a cell site with wireless voice users. This is markedly different from the traditional telephone network or cable television. In wireline networks, increased data traffic doesn't have a detrimental effect on the other services offered by wireline providers – voice or television. The same is true for cable. An increase in cable modem activity doesn't affect the television signal. While these network operators clearly need to have the ability to manage their networks, the impact of their other service offerings by high data use is not the same as it is in wireless.

¹¹ *Ibid*, p. 105

On wireless networks in the absence of network management, bandwidth intensive applications and other spectrum uses would have the potential to prevent or degrade the use of the voice service that consumers rely upon – and in the case of E-911, rely upon in emergency situations..... Second, the capacity of a cell site is shared between all users in that cell. Unlike the example where each user has a dedicated pipe to their home, the wireless user must share the available bandwidth with other users – both voice and data users – in their vicinity. Because of this, a number of factors can contribute to a degraded user experience in the absence of wireless network management. Without the ability to manage network resources, one user’s network demands can consume the entire capacity of the base station to which it is connected. This will, at a minimum, slow down the other users’ applications, and in the extreme will prevent other users from running their applications or making voice calls.¹²

The need to “manage network resources” that CTIA address in this discussion are related to “last mile” connections. Wireline networks, including FTTH, do not need to share last mile bandwidth in the manner that wireless networks do. Thus, a consumer’s wireline broadband connection is not degraded when the neighbor kids come home from school and begin downloading music and playing online games. This is an important reliability consideration when one considers the critical services (e.g. remote medical monitoring) that may be available via broadband connections. While wireless network management could theoretically place a higher packet priority on grandma’s medical monitoring services over junior’s online gaming, the ability to do so would certainly raise privacy concerns.

While we do not believe this is the best proceeding to comment on detailed USF reform proposals, the Range Family believes it is necessary to reply to one USF reform comment made by CTIA. In support of its proposals that USF support wireless broadband, CTIA states “the Commission can no longer afford to allow universal service to remain a means to prop up outdated technology and failing business models.”¹³ CTIA also states, “the current outdated policies create incentives for inefficiency [and] inhibit broadband deployment by reducing

¹² Comments of CTIA – The Wireless Association @, pages 29-30.

¹³ *Ibid*, p. 43.

providers' incentives to adopt innovative technologies.”¹⁴ As stated throughout these Reply Comments, wireline broadband networks, including FTTH, have many advantages relative to wireless broadband. Wireline broadband networks have wisely been deployed throughout rural America with the assistance of USF support. So, CTIA's broad brush statements that USF has supported “outdated technology” and “failing business models,” while creating “incentives for inefficiency” and “inhibiting broadband deployment,” is simply wrong with respect to broadband services provided by RLECS and does a disservice to the men and women at the FCC, NECA, and in the RLEC companies who have worked hard to promote broadband deployment in rural American in a manner that efficiently complies with FCC cost separations and recovery rules.

Lastly, it is worth noting that CTIA does raise a valid point when comparing cable modem broadband with wireless broadband. Specifically, CTIA states:

CTIA notes that cable modem data users also share capacity in a similar manner. However, because cable systems have far more capacity than modern wireless systems, the trade-off between capacity and latency and competition for network resources is less acute. As discussed below, simply adding wireless network capacity would not alone obviate the need for network management. Moreover, wireless providers do not have the option to simply install additional capacity, but must work within the constraints of the limited spectrum available to them.¹⁵

In other words, both cable modem broadband and wireless broadband have technical limitations associated with sharing of last mile resources, but the limitations for wireless broadband are worse. However, when the FCC evaluates cable modem broadband relative to FTTH, it should recognize the technical limitations of cable modem broadband.

¹⁴ *Ibid*, p. 44.

¹⁵ *Ibid*, footnote 61.

F. National Cable & Telecommunications Association (NCTA)

NCTA states that “cable operators now offer high-speed Internet service to more than 92 percent of American households.”¹⁶ While we do not have numbers that would dispute those statistics, it is our experience that cable broadband is not available in many rural areas we serve. Specifically, cable television and broadband service are typically available in only the in-town locations of towns of a certain size. The only subscription television services available beyond the town boundaries, in most instances, are those services provided by Dish Network and DirecTV. Moreover, the only broadband services available beyond the town boundaries, in most instances, are those services provided by the telecommunications company or satellite companies. In some of the smallest towns, cable television and broadband services are not available even in the in-town locations. Based on conversations with other RLECs throughout the country, the types of locations served by cable companies in our areas are typical of the locations served by cable companies in other rural areas. Thus, despite years of potential access to the same USF support received by RLECs, cable companies have simply decided not to serve the same rural locations served by RLECs. Accordingly, any financial support that would be provided for the deployment of cable broadband networks in areas served by RLECs, would, in many cases, be duplicative to the broadband infrastructure already deployed by RLECs.

For those very remote areas where it has been too cost prohibitive for RLECs to deploy broadband, the question then becomes, should financial support be given to RLECs or cable companies to deploy broadband networks? Given the commitments made by most RLECs to the in-town and out-of-town rural residents, as well as the fact that broadband infrastructure is already present beyond the town boundaries in most instances, the Range Family would argue

¹⁶ Comments of the National Cable & Telecommunications Association, p. 10.

that the logical choice would be to provide the financial support to the RLECs. Moreover, while cable companies can produce impressive broadband speeds¹⁷, the speeds produced by FTTH can be at least as great with virtually unlimited upgrade potential and without the sharing limitations present in cable networks. So, while providing financial support to cable companies may make sense in rural areas abandoned by RBOCs, in most cases, it wouldn't make sense to provide support to cable companies to provide broadband services in areas served by RLECs.

G. Comcast

Comcast takes a pot shot at USF in order to support its advocacy position for receiving USF support. Specifically, Comcast states:

[m]any cable operators, for example, are now providing voice, broadband Internet, and video services in many rural areas without receiving USF support. The existence of cable voice service in these areas – at prices sufficiently low to win customers away from subsidized ILECs – suggests that support for networks serving those areas is inefficient and competitively biased in favor of ILECs.

As stated in response to NCTA's comments, in rural areas served by RLECs, cable companies are providing service mostly to in-town customers only. The common term for serving low cost customers and not serving high cost customers is "cherry picking." If RLECs served only in-town customers, their costs wouldn't be nearly as high, and thus, there would not need to be nearly as much high cost support provided to RLECs.¹⁸ It is important to note that cable companies could have received the same level of support on a per-customer basis that the RLECs received had they agreed to meet the same eligible telecommunications carrier

¹⁷ *Ibid*, p. 11.

¹⁸ Although, due to regulatory and service quality requirements imposed on RLECs that are not imposed on VoIP and voice-over-cable providers, the costs for serving the same area will be higher for an RLEC than it will be for a VoIP or voice-over-cable provider, thereby, perhaps necessitating USF support to RLECs even in some in-town-only scenarios.

requirements that RLECs meet. So, rather than suggesting that RLECs are inefficient, perhaps the fact that cable companies have largely not served out-of-town customers in RLEC areas suggests that cable companies aren't as efficient as RLECs because a business case couldn't be made to serve the same customers that the RLECs serve using the same level of support the RLECs receive.

VII. Conclusion

The Range Family appreciates the opportunity to submit its Reply Comments on the FCC's Broadband Plan NOI. The Range Family understands the importance that broadband will play in the everyday lives of Americans. We are actively working to deploy FTTH to as many customers as possible because we believe that FTTH is the best broadband network option. We believe that FTTH is the network that will provide the best broadband experience that consumers can expect and has the greatest potential for economic growth, innovation, and societal improvements. While mobile wireless broadband provides mobility, it is, and likely will be, a complimentary service, and should be funded as such, if at all. In addition, cable broadband has not been deployed to the same extent as the landline broadband provided by rural carriers. Accordingly, in an incremental evaluation of the best use of financial support for unserved areas of rural carriers, cable is not the answer, especially given some of its shared network limitations.

The Range Family recommends that the Commission explicitly support broadband and middle mile transport with USF. Where a choice is required, the Commission should support FTTH because, for speed, reliability, safety, and upgradeability reasons, a fiber network is best suited as the primary network for the broadband-based services of the future. The Range Family also suggests that the Commission recommend that Congress appropriate additional money for

RUS to offer grants and low interest rate loans for the construction of fiber networks in rural areas.

Respectfully submitted,

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